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CLAIMS

1. A catalyst support particle comprising a core part and a surface layer,

5 wherein the molar fraction of the metal constituting the first metal oxide in the core part is higher than the molar fraction of the metal constituting the first metal oxide in the surface layer;

10 wherein the molar fraction of the metal constituting the second metal oxide in the surface layer is higher than the molar fraction of the metal constituting the second metal oxide in the core part;

wherein said core part and said surface layer each comprises a plurality of primary particles; and

15 wherein the primary particle diameter of said second metal oxide is smaller than the primary particle diameter of said first metal oxide.

2. The catalyst support particle according to claim 1, wherein the first and second metal oxides are independently selected from the group consisting of alumina, zirconia, titania and ceria.

3. The catalyst support particle according to claim 2, wherein said first metal oxide is zirconia and said second metal oxide is ceria.

25 4. The catalyst support particle according to claim 3, wherein the catalyst support particle has a particle diameter of 2.3 to 8.1 μm .

5. The catalyst support particle according to claim 3 or 4, wherein the primary particle diameter of zirconia constituting said core part is 100 nm or less.

30 6. An exhaust gas purifying catalyst comprising a noble metal supported on the catalyst support particle according to any one of claims 1 to 5.

7. A process for producing the catalyst support particle according to claim 1, comprising:

35 providing a sol containing at least a population of first metal oxide colloid particles and a population of second metal oxide colloid particles

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5 differing in the isoelectric point with each other, the particle diameter of said population of second metal oxide colloid particles being smaller than the particle diameter of said population of first metal oxide colloid particles,

10 adjusting the pH of said sol to be closer to the isoelectric point of said population of first metal oxide colloid particles than to the isoelectric point of said population of second metal oxide colloid particles, thereby aggregating said population of first metal oxide colloid particles,

15 adjusting the pH of said sol to be closer to the isoelectric point of said population of second metal oxide colloid particles than to the isoelectric point of said population of first metal oxide colloid particles, thereby aggregating said population of second metal oxide colloid particles onto said population of first metal oxide colloid particles aggregated, and drying and firing the obtained aggregate.